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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,749	01/02/2002	Gregory A. Lyon	33778	2952
116	7590	12/14/2004	EXAMINER	
PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108			LEE, HWA S	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,749

Applicant(s)

LYON, GREGORY A.

Examiner

Andrew Hwa S. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-21 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Remarks

This Office Action is in response to Applicant's amendment of 9/29/04. By the amendment, claim 1, 5-11, 13-17 and 19-21 have been amended, and claims 2, 3 have been canceled. Claims 1 and 4-21 are now pending. Receipt of the affidavit is acknowledged.

Response to Amendment

The declaration filed on 9/29/04 under 37 CFR 1.131 has been considered but is ineffective to overcome the Benner et al reference.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Benner et al reference to either a constructive reduction to practice or an actual reduction to practice. The submitted drawing does not sufficiently establish that the housing is made of a polymer, coated with an electrically conductive material, or is shielding from electromagnetic interference. However, for purposes of expediting the prosecution of the application, a new grounds of rejection follows without the Benner et al reference.

Claim Rejections - 35 USC § 103

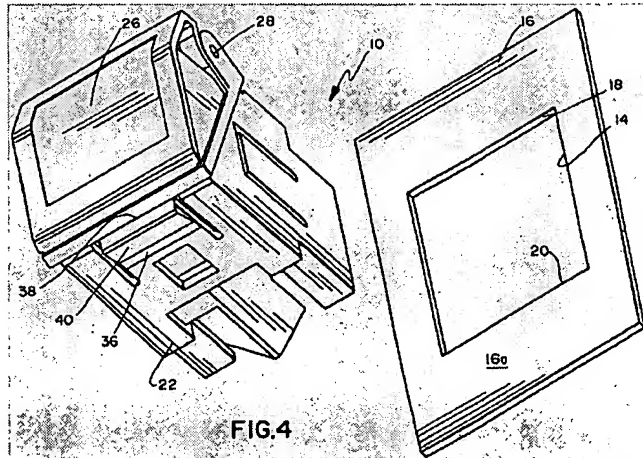
1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1 and 4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth in view of Bissinger (US 5,470,165).

Farnsworth shows a connector panel mount system comprising:

a connector receiving housing (12) having a plurality of surfaces for mounting to a receiving member (16) having first and second faces, the connector receiving housing having a cavity therein and one or more passages adjacent the cavity for receiving the fiber optic cable connector;



a protrusion (38 and/or 34)

on the connector receiving housing for engaging the first face of the receiving member;
and

a lip (34) on the connector receiving housing for engaging the second face of the receiving member;

whereby the housing is mounted to the receiving member by the interaction of the lip and the protrusion.

Farnsworth does not show the shape of the protrusion to be parabolic. Bissinger shows a parabolic protrusion. At the time of the invention, one of ordinary skill in the art would have made the protrusion to be parabolic in shape for the following motivations:

- a) "...providing high retaining forces which can also be produced at relatively low cost economically" (Abstract).
- b) "...by this configuration the outer boundaries of the retaining projections are solid and are integrally connected to the material of the bushing without separation" column 1, lines 65+.
- c) "...so that an arched, knuckle-like shape is produced. The resultant shape produced by the forming means yields a retaining bushing characterized by **extremely high strength, dimensional stability** (*as stated in the previous Office Action*), and immunity to damage even when very thin sheet material is used to form the retaining bushing" column 2, lines 5+.
- d) "...there are no sharp edges or corners which may cause damage to the bearing particularly to the seating surfaces when assembled." column 2, lines 14+
- e) "...the retaining projections are designed in such a way that they slope down continuously in the axial direction, decreasing from the highest radial point above the lateral surface in the area of the stamping line until they reach the level of the lateral surface. By this arrangement, optimum support is provided for the retaining forces acting on the end surface of the stamped area. Accordingly, on insertion into a bearing bore, the backs of the retaining projections serve advantageously as a guide ramp" column 2, lines 26+

With regards to claim 4, the protrusion and the lip define opposed surfaces.

3. **Claims 5, 8, 9, 10, 12, 15, 16, and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth in view of Poplawski et al (US 5,879,173).

Farnsworth shows all the limitations as show above for claim 1 but does not show the polymer and the coating of electrically conductive material.

Poplawski et al (Poplawski hereinafter) show a removable transceiver module and receptacle wherein a housing is made of polymer and is coated with an electrically conductive material. One of ordinary skill in the art would have further modified the housing of Farnsworth to be made of polymer material and coated with an electrically conductive material for the following motivations:

- a) "...provide a module with a coating which dissipates an electrostatic discharge and serves as an electromagnetic shield." column 2, lines 45+
- b) "...for preventing the escape of electromagnetic radiation from the receptacle." column 2, lines 52+.
- c) "...In a preferred embodiment, the potting box 64 is injection molded of a polymer material such as VALOX, STANYL, or any other glass-filled heat resistant material which can withstand solder reflow temperatures. In addition, it is preferred that the potting box 64 be either plated, wet plated, or vacuum metalaled with an aluminum or stainless steel coating in order to dissipate an electrostatic discharge and provide for electromagnetic shielding. As well, the transceiver

connector 20 (FIG. 1) may be plated, wet plated, or vacuum metalized, in order to reduce emissions and enhance grounding of the module. Such metalization of the connector 20 can bring the module in compliance with FCC Rules, Part 15. In a preferred embodiment, the connector 20 is metalized separately from the potting box 64 so that each attachment portion is metalized and provides for conductivity between the parts. As the connector 20 will be attached to a chassis containing fiber optic connectors which are at ground potential, the connector will ground the metalized potting box 64 which is attached to a daughter board. Such grounding enhances the module's ability to dissipate electrostatic discharge and provide for electromagnetic shielding.” column 6, lines 57.

As for claims 9, 15, and 19, the passage for receiving a connector is at an angle to an opening in the cavity.

4. **Claims 6, 7, 11, 13, 14, 17, are 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth and Poplawski as applied to claims 5 and 12 above, and further in view of Beck et al (US 5,259,792) and Porter (US 5,808,866) and Brennan et al (4,516,825). Farnsworth, Benner and Poplawski do not expressly show the material of the housing being polycarbonate and the conductive material being chrome or copper-nickel. Beck et al show the conductive material to be copper-nickel and Porter shows the chrome. At the time of the invention, one of ordinary skill in the art would have used chrome or copper-nickel since both Beck and Porter show their use as coatings as conductive material for protection, and a skilled

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artisan would have used polycarbonate material since polycarbonate is a well know polymer, as Brennan et al shows, in order to save production costs over more expensive metal (Beck et al, column 3, lines 18-46).

Response to Arguments

Applicant's arguments with respect to claims 1 and 4-21 have been considered but are moot in view of the new ground(s) of rejection. However, since the grounds of rejection for claims 1 and 4 are being maintained, the examiner will respond to applicant's respective arguments. It is confusing to the examiner why the applicant feels it is necessary to remind the examiner that hindsight is improper. The examiner had cited one motivation out of the multiple motivations clearly provided by Bessinger to use the parabolic protrusion. Nowhere has the applicant cited or shown how the examiner has looked to the applicant's disclosure for the motivation. The applicant also asks that the examiner show where in the prior art the motivation can be found. In response, the applicant is directed to read the Summary of the Invention and the Detailed Description of the Invention of Bessinger if the Applicant has not done so yet. For applicant's convenience, the following is a listing of few of the motivations as also cited above:

- a) "...providing high retaining forces which can also be produced at relatively low cost economically" (Abstract).
- b) "...by this configuration the outer boundaries of the retaining projections are solid and are integrally connected to the material of the bushing without separation" column 1, lines 65+.

- c) "...so that an arched, knuckle-like shape is produced. The resultant shape produced by the forming means yields a retaining bushing characterized by **extremely high strength, dimensional stability** (*as stated in the previous Office Action*), and immunity to damage even when very thin sheet material is used to form the retaining bushing" column 2, lines 5+.
- d) "...there are no sharp edges or corners which may cause damage to the bearing particularly to the seating surfaces when assembled." column 2, lines 14+
- e) "...the retaining projections are designed in such a way that they slope down continuously in the axial direction, decreasing from the highest radial point above the lateral surface in the area of the stamping line until they reach the level of the lateral surface. By this arrangement, optimum support is provided for the retaining forces acting on the end surface of the stamped area. Accordingly, on insertion into a bearing bore, the backs of the retaining projections serve advantageously as a guide ramp" column 2, lines 26+

Papers related to this application may be submitted to Technology Center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the PTO Fax Center located in CP4-4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Center number is 703-872-9306 for regular communications and for After Final communications.

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If the Applicant wishes to send a Fax dealing with either a Proposed Amendment or for discussion for a phone interview then the fax should:

a) Contain either the statement "DRAFT" or "PROPOSED AMENDMENT" on the Fax Cover Sheet; and

b) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa Lee whose telephone number is (571) 272-2419.

The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415.

A handwritten signature in black ink, appearing to read 'Andrew Lee', with a stylized, flowing script.

Andrew Lee
Patent Examiner
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December 10, 2004/ahl